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A New Species of *Aceraius* (Coleoptera, Passalidae) from Sabah, Borneo

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Abstract A new species, *Aceraius kikutai*, is described from Sabah, Borneo. It resembles *A. laniger* ZANG but can readily be distinguished from the latter by having the following characters: inner angle of left outer tubercle acute in dorsal view; lateral and upper margins of distal end of fifth tarsomere not so strongly projecting.

Key words: Coleoptera; Passalidae; Aceraius; new species; Borneo.

Recently, BOUCHER (1993) revised definitions of the passalid genera Ophrygonius Zang and Aceraius Kaup based on the morphology of mandible dentition patterns. When we examined a series of specimens from Borneo preserved in the collection of the Muséum national d'Histoire naturelle, Paris, which were assigned to the genus Aceraius according to Boucher's new definition, we found one specimen of an undescribed species. In addition, we found three specimens of this form in the collection of the Ecology Section, the Headquarters of Kinabalu National Park, Sabah, Malaysia.

Thus, we are going to describe a new *Aceraius* species based on these specimens. In the following description, we adopt the terminology of GRAVE-LY (1914) for external morphology and that of LINDROTH (1957) for male genitalia. The abbreviations of morphometric characters are: length of left outer tubercle, from the apex of left inner tubercle to the outer apex of left outer tubercle (LOTL); length of right outer tubercle (ROTL); width of left outer tubercle at the narrowest place (LOTW); distance between the apices of inner tubercles (DIT); distance between the apical angles of supraorbital ridges (DAS); body thickness at the center of metathorax (BT); width of elytra at the

54

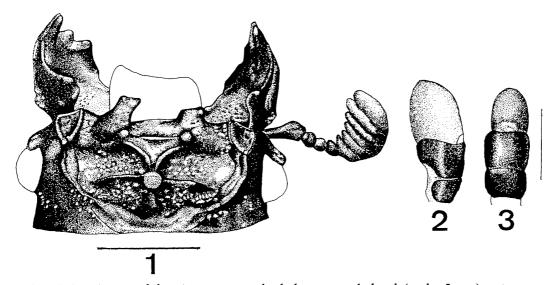
level of the shoulders (EW).

Aceraius kikutai sp. nov.

(Figs. 1-3)

Description of holotype. Male. Length from anterior margin of head to apices of elytra 46.4 mm. Body black, polished; BT/EW 0.74.

Anterior angle of head rounded. Ridge on canthus not so sharp. Left outer tubercle larger than the right one, transversely truncated at distal end; outer angle of left outer tubercle almost perpendicular; inner angle acutely pointed inward; outer margin of left outer tubercle concave in distal portion, weakly convex at base; inner margin of left outer tubercle slightly convex; right outer tubercle moderately large, obliquely truncated at distal end, not pointed downward in anterior view; outer angle of right outer tubercle a little more prominent forward than the inner one; upper surface of both outer tubercles rough: LOTW/LOTL 0.50; ROTL/LOTL 0.83. Inner tubercle pointed upward: DIT/DAS 0.29. Ridge between inner tubercles distinct, slightly convex upward in middle; frontal ridge almost straight, accompanying distinct groove anteriorly; parietal ridge slightly swollen upward in distal portion; supraorbital ridge not curved inward in anterior portion; apical angle of supraorbital ridge distinct, pointed upward and forward. Area between both outer tubercles hairless, rugose; areas between frontal and parietal ridges, behind parietal ridge and behind eye with setiferous punctures; area anterior to supraoccipital ridge with a pair of rugose and slightly depressed portions;



Figs. 1-3. Aceraius kikutai sp. nov., male, holotype. — 1, head (scale: 5 mm), setae are omitted from this figure; 2-3, male genitalia (scale: 2 mm), left lateral view (2), ventral view (3).

frontal area impunctate, hairless, rough. Upper margin of both mandibles without swelling behind upper tooth; upper tooth of left mandible higher than the right one, truncated and weakly bifid at apex, not pointed forward in profile, strongly bent inward in anterior view; anterior margin of left upper tooth vertical; right upper tooth truncated at apex, pointed forward in profile; anterior lower tooth of left mandible simple at apex, larger than left lowest terminal tooth; lowest terminal tooth of right mandible represented by a small denticle, invisible in dorsal view; upper portion of anterior lower tooth of right mandible represented by a low trapezoid, both anterior and posterior angles rounded, upper side slightly concave; lower portion of anterior lower tooth of right mandible represented by a small denticle, located more posteriorly than anterior angle of upper portion; inner side of right mandible with weak swelling between upper-most terminal tooth and upper portion of anterior lower tooth. Labrum with setiferous punctures, obliquely truncated, anterior margin almost straight in central portion, both angles rounded and slightly prominent forward, left angle more prominent forward than the right one; left lateral margin of labrum straight; right lateral margin slightly convex. Mentum with setiferous punctures in lateral portion, impunctate in central portion, weakly convex forward at middle of anterior margin, almost flat in anterior view. Antenna with six short lamellae.

Pronotum polished, with slight median groove, with large punctures in lateral portion, punctured and hairy in scar and in marginal groove; intercoxal process of prosternum sparsely punctured and hairy in posterior portion. Mesosternum mat, hairless, with shallow indistinct scar, rugose and with a few fine punctures in posterior middle portion; mesothoracic episternum frosted and sparsely punctured in posterior portion, polished and with large punctures in both anterior and dorsal portions. Ridge separating intermediate and lateral areas of metasternum distinct, punctured, hairy throughout; lateral and anterior intermediate areas densely punctured and hairy throughout; posterior intermediate area a little more sparsely punctured and hairy, with shallow irregular dents along posterior margin of central area; central area impunctate and Tenth rib of elytra densely punctured and hairy in anterior half, impunctate and hairless in posterior half; ninth densely punctured and hairy in anterior half, more sparsely in posterior half; eighth impunctate and hairless along whole length; seventh sparsely punctured and hairy along whole length. Ninth to seventh grooves of elytra hairy in posterior portions close to apices of Second to fourth tarsomeres moderately broadened distally in all legs; upper and lateral margins of distal end of fifth tarsomere rounded in front leg. distinct but not strongly projecting in middle and hind legs.

Second visible sternite punctured and hairy along middle ridge; third to sixth impunctate and hairless. Basal piece of male genitalia transverse, mem-

Table 1. Measurements (mm) of holotype and paratypes of Aceraius kikutai sp. nov. BL, body length. See text for other abbreviations.

	Holotype (male)	Paratype (male from Kinabalu, VII-1980)	Paratype (male from Kinabalu, 17–IV–1987)	Paratype (female from Kinabalu, 18-II-1993)
BL	46.4	44.4	44.3	44.3
BT	12.6	11.3	11.0	11.1
EW	15.0	15.0	14.6	15.0
LOTW	0.9	0.8	0.9	1.0
LOTL	1.8	1.5	1.7	1.7
ROTL	1.6	1.3	1.4	1.5
DIT	2.9	2.7	2.8	2.8
DAS	8.6	8.0	8.5	8.3

branous on dorsal side; parameres consolidated on ventral side; penis rounded at distal end, with orifice at base of dorsal side.

Variation. No evident sexual dimorphism. See Table 1 for variation in measurements.

Type series. Holotype: 1 male, Keningau-Kimanis Road pk 26, 1300 m, Sabah, Borneo, VIII–1991, J. Haxaire leg. Paratypes: 1 male, Kinabalu National Park (5,121 ft.), VII–1980, J. Jukian leg., 1 male, the Headquarters, Kinabalu National Park, Sabah, Borneo, 17–IV–1987, P. W. Walpole leg., 1 female, Sayap, Kinabalu National Park, Sabah, 18–II–1993, T. Kikuta leg. The holotype is deposited in the collection of the Muséum national d'Histoire naturelle, Paris. The three paratypes are deposited in the collection of the Ecology Section, the Headquarters of Kinabalu National Park, Sabah, Malaysia.

Etymology. The name is given after Mr. T. KIKUTA who gave us the opportunity to examine the passalid specimens preserved in the collection of the Ecology Section, the Headquarters of Kinabalu National Park. He is also the collector of one of the paratype specimens.

Notes. Aceraius kikutai sp. nov. resembles A. laniger ZANG but can readily be distinguished from the latter by having the following characters: inner angle of left outer tubercle acute in dorsal view; lateral and upper margins of distal end of fifth tarsomere not so strongly projecting.

Acknowledgement

We wish to express our hearty thanks to Mr. T. KIKUTA, the Ecology Section, the Headquarters of Kinabalu National Park, for giving us the opportunity to examine the passalid specimens and to Mr. J. HAXAIRE (France) for having so kindly collected for us the specimen presntly asigned to the holotype.

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Occurrence of Strongylophthalmyia ustulata ZETTERSTEDT (Diptera, Strongylophthalmyiidae) from Japan and North Korea¹⁾

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Key words: Diptera; Strongylophthalmyiidae; Strongylophthalmyia ustulata; new record; Japan; North Korea.

Eight Palaearctic species of Strongylophthalmyiidae were recently revised by SHATALKIN (1993), and 2 of them and 1 Oriental species are known to occur in Japan (IWASA, 1992).

Recently, I collected some adult specimens belonging to the genus Strongylophthalmyia in a forest of Tokachi District, Hokkaido. As a result of the examination, this species was proved to be Strongylophthalmyia ustulata Zetterstedt. In addition, I obtained several specimens of the Sytrongylophthalmyia from North Korea by the courtesy of Dr. M. Kozánek of Slovakia. They were also identified as S. ustulata Zetterstedt. This species has been recorded from Europe (Sweden) to Russian Far East (Amur District), and now is recorded from North Korea and Japan for the first time.

¹⁾ Contribution No. 163 from the Laboratory of Entomology, Obihiro University of Agriculture and Veterinary Medicine.